



Nutrient TMDL Workshop

February 15-17, 2011 • New Orleans, LA

Agenda

Day 1 - Tuesday, Feb 15

- 8:00** **Registration**
- 8:30** **Welcome**
- 8:45** **Workshop Purpose and Goals**
Menchu Martinez, US EPA Headquarters and **Jim Ruppel**, US EPA Region 8

Overview Session 1 – Programmatic and Scientific Background *Moderator: Mike Haire, US EPA HQ*

- 9:00** **Nutrient Effects on Aquatic Ecology, Recreation and Drinking Water Supply: Nutrient and Key Response Indicators**
Michael Paul, Tetra Tech
- 9:30** **Nutrients and the Clean Water Act Section 303(d) Listing and TMDL Program**
John Goodin, US EPA Headquarters
- 10:15** **Questions and Answers**
- 10:30** **Break**

Overview Session 2 – Nutrient Criteria Development *Moderator: Mike Haire, US EPA HQ*

- 10:45** **Nutrient Criteria: National Overview/Recent Developments/Look to the Future**
Dana Thomas, US EPA Headquarters
- 11:20** **Overview of EPA's Promulgated Numeric Nutrient Criteria for Florida's Streams, Lakes and Springs**
Daryll Joyner and **Jan Mandrup-Poulsen**, Florida Department of Environmental Protection

12:15 –1:30 *Lunch on your own*

Listing Session 1 – Assessing and Listing Nutrient Impairments
Moderator: Kim Caviness, Mississippi Department of Environmental Quality

- 1:30** **Results of the National Survey**
Sarah Lehmann, US EPA Headquarters
- 2:00** **Listings Based on Narrative Water Quality Criteria**
Bill Painter, US EPA Headquarters
- 2:20** **Stressor Identification**
Jeffery Frithsen, US EPA Headquarters
- 3:00** **Discussion, Questions and Answers**
- 3:30** *Break*

TMDL Session 1 – Overview of the Existing Methods for Nutrient TMDL Development
Moderator: Kim Caviness, Mississippi Department of Environmental Quality

- 3:45** **Overview of Findings from Compendium of Nutrient TMDLs**
Rosaura Conde, US EPA Headquarters and **Jennifer Olson**, Tetra Tech
- 4:15** **Quantitative Prediction of Nutrient Effects on Key Response Indicators and Use**
Tim Wool, US EPA Region 4
- 5:00** *Adjourn*

Day 2 - Wednesday, February 16

- 8:30** **Opening Remarks**

TMDL Session 2 – Setting Nutrient Targets
Moderator: Tom Stiles, Kansas Department of Health

- 8:45** **Developing Nutrient Concentration Targets from Narrative Criteria**
Bill Painter, US EPA Headquarters
- 9:00** **Setting Water Quality Targets for Phosphorus and Nitrogen**
Michael Paul, Tetra Tech

- 9:30** **Pennsylvania Nutrient TMDLs – Using a Weight of Evidence Approach**
Elizabeth Gaige, US EPA Region 3
- 10:00** **Michigan Approach to Setting Nutrient Targets Based on Biological Impairments**
Sylvia Heaton, Michigan Department of Environmental Quality
- 10:30** *Break*
- 10:45** **Identification of Nutrient Concentrations and Enrichment Indicators for Application in a Weight- of-Evidence Based Nutrient Water Quality Standard for Ohio**
Bob Miltner, Ohio Environmental Protection Agency
- 11:15** **Development of Biologically Based Total Maximum Daily Loads for Nutrients in the Upper Midwest**
Shivi Selvaratnam, Indiana Department of Environmental Management and **Jeff Frey**, USGS
- 11:45** **Panel Discussion**
- 12 – 1** *Lunch*

Concurrent Session 1A – TMDL Modeling Applications
Moderator: Joni Nuttle, Colorado Department of Public Health & Environment

- 1:00** **Nutrient Modeling Overview**
Dr. Mazdak Arabi, Colorado State University
- 1:45** **Using Load Duration Curves in Nutrient TMDLs**
Bruce Cleland, Tetra Tech
- 2:05** **Water Quality Modeling – Technical Applications Using Mechanistic Models**
Tim Wool, US EPA Region 4
- 2:40** **Nutrient TMDLs for Reservoirs with Limited Data: Assessing Uncertainty Using Monte Carlo Simulation**
Andrew Fang, Oklahoma Department of Environmental Quality

Concurrent Session 1B – State Approaches to Nutrient TMDLs
Moderator: Mark Osborn, Missouri DNR

- 1:00** **Nutrient TMDLs Issues in Kentucky**
Andrea Fredenburg, Kentucky Division of Water

- 1:20 Nutrient TMDL Development and Implementation in New Mexico**
Shelly Lemon, New Mexico Environment Department
- 1:40 North Carolina Nutrient TMDLs: Integrating State and Federal Programs**
Pam Behm, North Carolina Division of Water Quality
- 2:05 Los Angeles Area Lake TMDLs**
Valentina Cabrera-Stagno, US EPA Region 9
- 2:30 Expressing Load Allocations for Nutrient TMDLs with Direct Linkage to Implementation Tools**
Kevin Kirsch, Wisconsin Department of Natural Resources
- 3:00 Break**

Concurrent Session 2A – Technical and Regulatory Issues in TMDL Development
Moderator: Joni Nuttle, Colorado Department of Public Health & Environment

- 3:15 Linking Nutrients and Sediment Oxygen Demand, Souris River TMDL**
Heather Husband Duchscherer, North Dakota Department of Health
- 3:45 Cutler Reservoir's Phased TMDL for Nutrients & Dissolved Oxygen**
Michael Allred, Utah Department of Environmental Quality
- 4:15 Convergence of the Clean Water Act and a Federal Civil Works Project – the Central and South Florida Project Canals**
Kevin Carter, South Florida Water Management District

Concurrent Session 2B – TMDL Implementation
Moderator: Amy Walkenbach, Illinois Environmental Protection Agency

- 3:15 Addressing Uncertainty in TMDL Implementation**
Tom Davenport, US EPA Region 5
- 3:45 Development of a Water Quality Trading Framework in Wisconsin for Phosphorus**
Kevin Kirsch, Wisconsin Department of Natural Resources
- 4:15 Grand Lake St. Mary's Lake Restoration**
Russ Gibson, Ohio EPA and **Tom Davenport**, US EPA Region 5
- 4:45 Adjourn**

Day 3 - Thursday, February 17

8:30 **Opening Remarks**

Implementation Session

Moderator: Amy Walkenbach, Illinois Environmental Protection Agency

9:00 **Point Source Reduction Strategies**

Joh Kang, Tetra Tech

9:30 **Implementation Strategies for Reducing Nonpoint Source Nutrient Impacts**

Russ Gibson, Ohio Environmental Protection Agency

10:00 **eRAMS – A Tool to Integrate Point and Nonpoint Source Reduction Strategies**

Dr. Mazdak Arabi, Colorado State University

10:30 **Break**

Multi-Jurisdictional Efforts

Moderator: Chris Lewicki, US EPA Headquarters

10:45 **Update from the Gulf of Mexico Alliance and the Mississippi River/Gulf of Mexico Nutrient Task Force**

Kim Caviness, Mississippi Department of Environmental Quality

11:05 **Multi-Jurisdictional TMDLs – Chesapeake Bay and Others**

Mike Haire, US EPA Headquarters

11:45 **Closing Remarks**

John Goodin, US EPA Headquarters

12:00 **Adjourn Workshop**